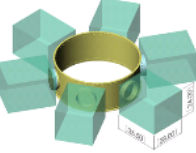
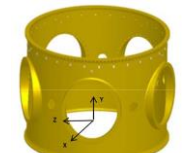


LSP Small Payload Access to Space Catalog

SALMON-3 MO PEA TBD (2019 Astrophysics)
Basic; February 27, 2019

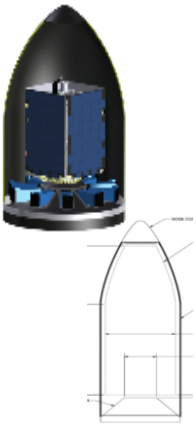


Reduction of PEA Cost Cap	Volume (interface)	Payload Max Launch Mass	Orbits	Availability of Opportunities (H/M/L)	Launch Vehicles	LV Risk	Comments
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ESPA Class Secondaries

ESPA		\$10M ("Full" SCM) or no charge (SmallSat/ CubeSat Constellation)	*61 x 71 x 97 cm (38cm clampband or sep system)	*six ports 322 kg/port	multiple	High	Falcon 9/Atlas V	G	LV is LSP Certified; ESPA is operational
ESPA Grande			*107 x 117 x 97cm (61cm clampband or sep system)/port	*4 or 5 ports 465 kg/port	multiple	High	Falcon 9/Atlas V	G	LV is LSP Certified; ESPA Grande is operational; some port accommodations may not be operational

* see provider websites for updated interface details

Primaries

VCLS Class		\$10M	1.1m dia (smaller dia above 0.6m height)	0-150 kg	500km SS to 45 deg	Medium	Rocket Lab's Electron 	Y	Achieved 1st launch; No LSP Certification; For high risk-tolerant payload
		\$15M		0-300 kg	500 km SS		Virgin Orbit's Launcher One 	R	Awaiting 1st launch; No LSP Certification; For high risk-tolerant payload

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